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A Brief Summary of Economic Conditions

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.E NEW YEAR opens with assurance of an improved agricultural tuation. BAE estimates that farm income will be higher in than in 1938. The general index of prices of farm products d the year at 96 percent of pre-war—highest since last March. ıgthening factor in coming months will be the improved consumer ınd flowing from increased industrial activity during the last half 938. * * * Events of the past month included the overming vote of cotton growers for marketing quotas in 1939, the ıg of tobacco and rice growers against marketing quotas, and the ıg of world wheat supply estimates to the largest figures on ernment record—more than 5,000,000,000 bushels. * * * in the month BAE issued its first report on winter wheat, showing 8-percent reduction below the acreage seeded in the fall of 1937. Bureau reported an 18-percent increase in the 1938 fall pig crop ɔared with the fall of 1937.

Commodity Reviews

DEMAND: Improvement

CONSUMER demand for most farm products apparently continues to lag behind the rise in industrial activity. Total industrial production in November was 2 percent above the 1923–25 level, and only about 13 percent below the peak reached in 1937. Preliminary indications are that December will average higher than November. Consumer incomes have not advanced as much as industrial activity. Past experience in recovery periods indicates, however, that incomes will continue to increase for a time after the initial rise in industrial activity has ceased.

Following a recovery in business activity many consumers who have been unemployed for some time. or whose incomes have been reduced, find it necessary to make certain adjustments before they can go back to their former buying or consumption practices. Unpaid rent, store bills, lapsed installment payments and other indebtedness which have accumulated during the recession must be paid, and miscellaneous delayed purchases of items such as shoes and clothing may be necessary before the family is in a position to resume its normal buying of food.

Thus, for a considerable period after income has been restored the family may be unable or unwilling to pay the grocer higher prices for butter, steaks, or fruit. Gradually, however, these consumers find themselves in a position to buy more, or to pay higher prices for foods. For products of which there are stocks in storage or increasing production, this increased demand on the part of many individual consumers may result merely in greater consumption, without much change in price. If, on the other hand, the quantity available for consumption is not changed, the additional consumers who want to buy the product permit retailers to raise prices. Higher retail prices are reflected, sometimes in advance and sometimes with a lag, in the wholesale markets.

Apparently, following an increase in employment and in the income of consumers, the demand responds more quickly for some products than for others. Meats seem to be among the products, the demand for which is affected first, and butter apparently is among those products for which the lag in demand is greatest. For example, meat and livestock prices were quickly and severely affected by the industrial recession in the fall of 1937, whereas, consumer expenditures for butter held up well until January 1938. Likewise, in the recovery from the recession this fall, the demand for meats seemed to be affected almost immediately, whereas consumers are still spending materially less for butter than they were a year ago. Although data relating to total consumer expenditures are not available for many foods, these differences among commodities in the way in which demand reacts to changes in business conditions and consumer incomes help to explain the price behaviour of such commodities in periods of rapidly changing industrial conditions.

Thus, even if industrial activity fails to expand further during the next few months, it seems probable that the consumer demand for farm products in the United States [illegible] continue to improve somewhat dur[illegible] the early part of the winter at le[illegible] This improvement may be follo[illegible] by a longer period of relative stabil[illegible]

INCOME: Reduction

Farmers' cash income for mark[illegible] ings in November, estimated at [illegible] million dollars, raised the total for [illegible] first 11 months of 1938 to 6,463 milli[illegible] This compares with 7,440 mill[illegible] during the like period of 1937. [illegible] November 1938 income was season[illegible] less than in October, and was

million dollars less than in November 1937.

Government payments in November, amounting to 48 million dollars, raised the total of farmers' income from this source during the first 11 months of 1938 to 443 million. This compares with 358 million during the like period of 1937. The November 1938 payments were less than in October, but were 45 million dollars more than in November 1937

	Income from marketings	From Government payments	Total
November:			
1938	$600,000,000	$48,000,000	$708,000,000
1937	713,000,000	3,000,000	716,000,000
1936	749,000,000	19,000,000	768,000,000
January–October:			
1938	6,463,000,000	443,000,000	6,906,000,000
1937	7,440,000,000	358,000,000	7,798,000,000
1936	6,853,000,000	251,000,000	7,104,000,000

PRICES: Higher

Nineteen thirty-eight ended with the index of prices of farm products at 96 percent of pre-war, the highest since last March. December price gains were registered in grains, fruits, and dairy products. Group indexes which declined in December included meat animals, chickens and eggs, and cotton and cottonseed.

The index for all products combined for the full year 1938 was 95 percent of pre-war. This compares with 121 in 1937, which was the highest since 1930. The ratio of prices received to prices paid by farmers in 1938 averaged 77 percent of pre-war, as compared with 93 in 1937. The 1937 figure was the highest since 1929.

Index Numbers of Prices Received and Paid by Farmers

[1910–14=100]

Year and month	Prices received	Prices paid	Buying power of farm products[1]
1937			
December	104	126	83
1938			
January	102	126	81
February	97	126	77
March	96	125	77
April	94	125	75
May	92	125	74
June	92	124	74
July	95	123	77
August	92	122	75
September	95	121	79
October	95	121	79
November	94	121	78
December	96	120	80

[1] Ratio of prices received to prices paid.

Prices of Farm Products

Estimates of average prices received by farmers at local markets based on reports to the Bureau of Agricultural Economics. Average of reports covering the United States weighted according to relative importance of district and States.

Product	5-year average, August 1909–July 1914	December 1909–13	December 1937	November 1938	December 1938	Parity price, December 1938
Cotton, lb. ... cents	12.4	12.2	[2] 7.67	8.52	8.20	15.5
Corn, bu. ... do	64.2	57.7	48.5	40.0	43.1	80.2
Wheat, bu. ... do	88.4	86.7	83.6	52.0	53.6	110.5
Hay, ton ... dollars	11.87	11.99	8.79	6.82	6.81	14.84
Potatoes, bu. ... cents	69.7	62.3	53.0	54.7	61.4	85.4
Oats, bu. ... do	39.9	38.3	29.1	22.5	24.4	49.9
Soybeans, bu. ... do	(1)	(1)	.83	.63	.67	----------
Peanuts, lb. ... do	4.8	4.6	3.2	3.3	3.3	6.0
Beef, cattle, cwt. ... dollars	5.21	5.03	6.08	6.32	6.40	6.51
Hogs, cwt. ... do	7.22	6.73	7.54	7.25	6.90	9.02
Chickens, lb. ... cents	11.4	10.6	16.4	13.6	13.6	14.2
Eggs, doz. ... do	21.5	29.9	26.0	29.0	27.9	[3] 40.7
Butterfat, lb. ... do	26.3	29.9	38.4	20.5	27.0	[3] 35.9
Wool, lb. ... do	18.3	18.6	23.6	20.5	20.2	22.9
Veal calves, cwt. ... dollars	6.75	6.74	8.09	8.27	8.04	8.44
Lambs, cwt. ... do	5.87	5.52	7.48	6.82	7.08	7.34
Horses, each ... do	136.60	132.10	[2] 86.00	79.40	79.80	170.80

[1] Prices not available. [2] Revised. [3] Adjusted for seasonality.

COTTON: Exports Small

Feature of the cotton situation is the decline in United States exports. Exports from August 1 to December 29 totaled 1,888,000 bales as compared with 3,231,000 bales during the like period of 1937—a decline of 42 percent. Mill activity continues at relatively low levels in Europe and the Orient.

Domestic mill activity slackened during December, following a November consumption that was the largest for that month with one exception since 1928. Domestic consumption in the first 4 months of the current season totaled about 2,235,000 bales, or slightly more than for the same period in 1937. During the 10 years ended with 1936, consumption in the first 4 months of the season averaged about 2,050,000 bales.

A slight reduction in the December cotton crop estimate put the 1938 United States crop at 12,008,000 bales, compared with 18,946,000 bales in 1937, and with the 1927–36 average of 13,201,000 bales. Estimates of foreign commercial production also have been reduced slightly, to 16,000,000 bales, compared with 18,160,000 in 1937, and with a 10-year average of 12,575,000 bales.

Despite the unfavorable world supply and demand situation, cotton prices have been holding above 8¼ cents for Middling seven-eighths inch in United States spot markets, supported chiefly by the Government loan to cotton growers. Government loan stocks of cotton on December 29 totaled more than 10,700,000 bales.

TOBACCO: Lower Priced

The Burley tobacco markets opened on December 5 and 6. Deliveries have been extremely rapid. Sales indicate that the crop average price will be lower than last year. Prices of the low grades in mid-December were fairly well in line with a year ago; the better grades used for smoking tobacco and cigarettes were sharply lower. Growers had expected that the average price would be equal to or better than a year ago.

The crop of tobacco now being sold is remarkable for its high percentage of smoking grades, the most lucrative portion of Burley production and the low percentage of filler or chewing grades which normally sell low. It is the second crop in succession which greatly exceeds consumption requirements. The 1937 crop of 402,731,000 pounds exceeded disappearance during the ensuing 12 months by 88,950,000 pounds.

It is doubtful if disappearance during the current year ending October 1, next, will greatly exceed 315,000,000 pounds. This means that the crop now being sold, estimated in December at 387,663,000 pounds, may be from 60 million to 63 million pounds in excess of requirements.

The most disturbing factor is the effect which excess production in 1937 and 1938 will have on the market situation for 1939.

WHEAT: Estimates Raised

Latest estimates put the world supply of wheat for the year beginning July 1 last at the largest on record 5,043 million bushels. This compares with 4,336 million bushels the preceding year. Estimates indicate that the world carry-over of wheat on July 1 next will be about 1,200 million bushels, compared with about 600 million on July 1, 1938.

Changes in world production figures during the past month included a small reduction in the United States 1938 crop, an increase in France, and an unexpectedly large increase in Argentina. The Argentine crop, estimated at 216 million bushels, would be the second largest on record for that country. It will begin soon to move in volume into the world markets.

Meanwhile, a United States winter wheat area of 46 million acres seeded for harvest in 1939 was reported. This compares with 56 million acres seeded in the fall of 1937. A produc-

tion of 485 million bushels was indicated, compared with 686 million bushels in 1938. If a similar reduction in spring wheat acreage is made it would suggest a total spring and winter wheat crop of about 680 million bushels in 1939, compared with 931 million in 1938.

A total crop of 680 million bushels would approximate the average domestic wheat disappearance of 683 million bushels, and permit of a reduction in the carry-over approximately by the amount of our exports. Export sales of wheat and flour made wholly of United States wheat totaled 71 million bushels from July 1 last through December 10.

Domestic wheat prices advanced in December on announcement of Government export sales to the United Kingdom, smaller domestic marketings, and unfavorable moisture conditions for winter wheat.

FEED: Heavy Supply

The supply of feed grains and of hay per grain consuming animal is the largest in more than 10 years. Livestock are being fed liberally this winter; nevertheless a large supply of feed will be carried over into the 1939 season. Principal supports to feed grain prices in recent weeks have been the Government corn loan and the prospects for a good demand for winter feeding. Prices of hay are the lowest in 6 years.

The 1938 soybean crop, estimated at 57.7 million bushels, was the largest on record. Supplies of all high protein feed have been estimated about 13 percent smaller than a year ago, but somewhat larger than supplies in other recent years. More wheat and about the same quantity of rye probably will be fed this season than last. Production of wheat millfeeds this season will probably be the largest in 2 years.

United States exports of corn in the 1937–38 marketing year ended September 30 last were the largest in 16 years—totaling 140 million bushels. Exports are expected to continue fairly large this winter, but to decline sharply when Argentine corn goes on the world markets next spring. Argentina normally is the world's leading exporter of corn; the large United States exports during the past year were the result of the short Argentine crop in 1937–38.

CATTLE: Increased Feeding

Evidence accumulates of a net increase in cattle feeding this season compared with last. More cattle are being fed in the Corn Belt, fewer in Western States—notably California and Colorado. Decreases are reported also in the Lancaster feeding area of Pennsylvania and Maryland, in Texas, and in Oklahoma.

Shipments of stocker and feeder cattle from stockyards markets into the Corn Belt were 4 percent larger in July through November 1938 than in the like period of 1937. They were the largest for the period in 7 years. November prices of these cattle were the highest for the month in 8 years. Direct shipments of feeder cattle (not going through stockyards) also have been large. Factors in the increased feeding are the large supplies and low prices of feed grains in nearly all Corn Belt States.

Marketings of grain fed cattle are expected to increase seasonally in the next few months. The number of such cattle marketed in the first half of 1939 probably will be larger than a year earlier. Marketings of the lower grades of slaughter cattle, including cows, are expected to decrease seasonally. They are likely to be smaller than in the like period of 1937.

Early December prices of the several grades of slaughter steers at Chicago were not greatly different from a year earlier, but the average price of stocker and feeder steers was somewhat higher. Prices of the better grades of cattle usually decline and prices of the lower grades usually advance in the first half of the year.

The 22 truck crops were harvested from 3,065,700 acres in 1938—also the second largest on record—compared with 3,254,770 acres in 1937, and with 2,473,610 acres in 1929. Of the total area, 1,706,360 acres were harvested for market in 1938, compared with 1,690,900 in 1937, and with 1,289,370 in 1929. The area harvested for manufacture in 1938 was 1,359,340 acres, compared with 1,563,870 in 1937, and with 1,184,240 in 1929.

FRUITS: Heavy Supply

The orange crop from the 1938 bloom has been indicated at more than 78 million boxes—the largest on record. The crop from the 1937 bloom was 74 million boxes. A new high record is also indicated for grapefruit. the 1938–39 crop having been estimated at nearly 41 million boxes, or about one-third more than in 1937–38.

Citrus fruits have been lower priced this season than last, but apples have been selling materially above the relatively low prices a year ago. Stocks of apples in cold storage on December 1 totaled 31 million bushels, which was 13 percent less than the record stocks on the same date in 1937, but 6 percent above average.

Pears also have been selling somewhat lower this season than last. The December 1 cold storage holdings of pears totaled 2.3 million boxes, or nearly one-third more than on December 1, 1937, and more than half again as much as average. Total cold storage stocks of frozen fruits on December 1 were about 137 million pounds, compared with 144 million on November 1.

DAIRYING: Heavy Production

Milk production continues heavy. The low point of the seasonal decline was reached in December; nevertheless production was close to the largest on record for that time of year. During the next few months the seasonal rise in production may be about average, but the output probably will be relatively heavy.

Milk cows were being fed rather more than the usual quantity of grain and concentrates in the early part of the winter feeding period. Abundant supplies of relatively low-priced grains are available. Dairymen also have been shifting back towards heavier feeding of corn and other home raised grains where these are available

There is some tendency also toward the utilization of mill feeds closer to the points of production, and a general tendency to depend less on the purchase of commercial mixed feed. The increase in soybean production and the decrease in supply of cottonseed meal are also reflected in an increased use of soybeans and soybean meal in place of cottonseed meal.

Butter prices have improved from summer and fall low levels, but in mid-December were lower than a year earlier and the lowest for the season since 1933. The November-December advance was attributed largely to a seasonal decline in production and to improved consumer demand.

Stocks of all dairy products are large, but a large portion of the supply of butter is held by the Dairy Products Marketing Association. These butter stocks are available for resale in the market and to the Federal Surplus Commodities Corporation for relief distribution. Because of large supplies in existence and in prospect, total consumption of manufactured dairy products is expected to be larger this winter than last.

POULTRY, EGGS: Profits

Poultry and egg producers have profited by the abundance of low-priced feed, principal cost item in the poultry and egg industry. Egg production per layer has been heavy, making new high records in 1938. Prices of eggs have compared favorably with 1937 figures. Despite the increased production, January 1 storage stocks were expected to be close to the smallest on record.

Chicken prices have not done so well, but are now advancing season-

ally. Cold storage holdings are heavier than a year ago and above the 5-year average for this time of year. Best prospect for chicken prices is the improved buying power of consumers. The Thanksgiving and Christmas turkey deal turned out fairly well for producers, considering the 4 percent increase in production in 1938 over 1937.

Background of the poultry and egg situation in coming months is the larger than usual number of early pullet layers which have been added to farm flocks. This means a continuing high record of egg production. The average number of hens and pullets of laying age in farm flocks is larger than a year ago in all parts of the country, but especially so in West North Central, South Atlantic, and South Central States.

Feed prices continue low in relation to prices being received by farmers for poultry and eggs. The feed-egg ratio in December 1938 was about 20 percent lower than in December 1937. The feed situation is expected to continue favorable to poultrymen at least until the approach of the 1939 harvest.

EXPORTS, IMPORTS

Figures for our foreign trade in agricultural products during the first 11 months of 1938 are similar to those for the corresponding period of 1934 just before the first of the recent great droughts began to have its principal effect on United States farm marketings. Exports were higher in 1938 than during 1934 (and very much higher than last year) while imports were almost as low as during 1934.

A conspicuous exception to the general rise in exports is cotton, which has been exported in very small quantity thus far this year. One of the best farm export showings has been made by wheat and flour, although sales of these commodities in recent months have fallen considerably from the levels reached earlier in the year. In the case of imports, tobacco purchases have been larger this year than last, but other leading commodities have been imported in relatively small quantities.

The following table shows United States exports and imports of leading farm products:

United States: Exports and Imports of Specified Agricultural Commodities, January–November Average 1924–29, Annual 1937 and 1938, and November 1937 and 1938

Commodity	Unit	January–November			November	
		Average 1924–29	1937	1938 preliminary	1937	1938 preliminary
		Thousands	*Thousands*	*Thousands*	*Thousands*	*Thousands*
Exports:						
Bacon, hams, and shoulders [1]	Lb	344, 075	38, 189	58, 881	5, 200	6, 874
Lard, including neutral	Lb	713, 526	114, 483	185, 405	18, 467	16, 009
Wheat, including flour	Bu	170, 682	43, 919	104, 511	8, 597	6, 917
Apples [2]	Bu	12, 313	6, 753	10, 088	1, 365	1, 231
Pears, fresh	Lb	58, 600	112, 397	148, 666	17, 479	18, 454
Tobacco leaf	Lb	464, 460	359, 259	420, 552	54, 224	52, 975
Cotton excluding linters (500 pounds)	Bale	7, 394	5, 263	4, 190	852	508
Imports: [3]						
Cattle	No	309	498	393	17	55
Beef, canned, including corned	Lb	[4] 34, 863	84, 742	71, 778	6, 978	5, 946
Hides and skins, agricultural	Lb	[5] 393, 107	293, 096	153, 773	18, 458	23, 947
Barley malt [6]	Lb	846	358, 662	92, 800	8, 070	8, 048
Sugar, excluding beet (2,000 pounds)	Ton	4, 167	3, 046	2, 922	153	125
Flaxseed	Bu	18, 639	26, 360	13, 889	1, 774	1, 565
Tobacco leaf	Lb	66, 753	55, 247	56, 686	4, 289	4, 661
Wool, excluding free in bond	Lb	134, 145	156, 454	29, 677	4, 085	4, 496

[1] Includes Cumberland and Wiltshire sides.
[2] Includes barrels, baskets, and boxes in terms of bushels.
[3] General imports prior to 1937. Subsequently imports for consumption.
[4] Includes a small amount of "Meats canned, other than beef."
[5] Includes reptile and fish skins.
[6] Imports for consumption.

Industrial Unemployment and the Farmer

FARMERS have a vital stake in a continuation of the present industrial recovery to the point of full industrial employment. If the country as a whole were fully at work, factory and mining production as measured currently by the Federal Reserve Board would probably be fully 50 percent greater than it is at present. Consumer expenditures for food would be perhaps 5 billion to 6 billion dollars greater and probably half of this sum would be passed on to farmers.

Such a rise in industrial activity would mean greater foreign demand, since increased industrial activity means increased purchases of industrial goods from abroad and therefore more dollars available to foreign countries for our farm and industrial products. It would mean greater opportunities for work in towns and cities for the surplus farm population in the South and Middle West, whose output is no longer wanted abroad. With a reduction in the number of persons sharing a given farm income, there would be a larger per capita income for those remaining on farms.

FOR these and many other reasons, it is pertinent to examine one of several possible trends that industrial activity might pursue during the present recovery movement, and to obtain some impression as to how long the present trend toward recovery in industrial activity and in the domestic demand for farm products may last; how high it is likely to go before the usual letdown sets in; and what the prospects are that full employment will be realized during the next year or two.

There are those who argue that the present spending program of the Federal Government, the encouragement being given to home building, the prospect of some increased expenditures by public utilities, and increased expenditures by the Federal Government for armaments as relief activities are gradually curtailed, will carry industrial activity to substantially higher levels in 1939 and 1940 than at present, and that unemployment will be fairly completely reduced.

There are others, however, who are apprehensive partly because of possible adverse developments in Europe, partly because of the prospect of the reduced Federal contribution to purchasing power if relief expenditures are curtailed, and partly because of some evidence that new orders in some lines are falling off and that current production may have expanded faster than current consumption and may again be producing an increase in inventories.

AS a first aid in an overall appraisal of prospective business and demand conditions, we may start with some suggestion as to what might be the normal or typical course. This would then serve the reader as a basis for making his own guess, depending on current developments and on his optimistic or pessimistic bias. For this purpose it will be helpful to contrast the course of industrial activity during the past year and a half with similar abrupt declines and recoveries in earlier periods.

Sharp declines like that of 1937 occurred in 1920, 1907, and 1893. (See chart on the following page showing the 48-month course of business activity after the beginning of each of these depressions.) In each of these cases, the decline was abrupt, and after a lapse of 10 to 14 months recovery was well underway. Within 24 months after the beginning of the sharp decline industrial production had recovered to about the volume before the decline and then continued to higher levels.

The entire recovery of 1921–23 was somewhat more extensive than the other two. In each of the three cases, however, production declined in varying degrees after about 2 years of recovery. This experience is fairly typi-

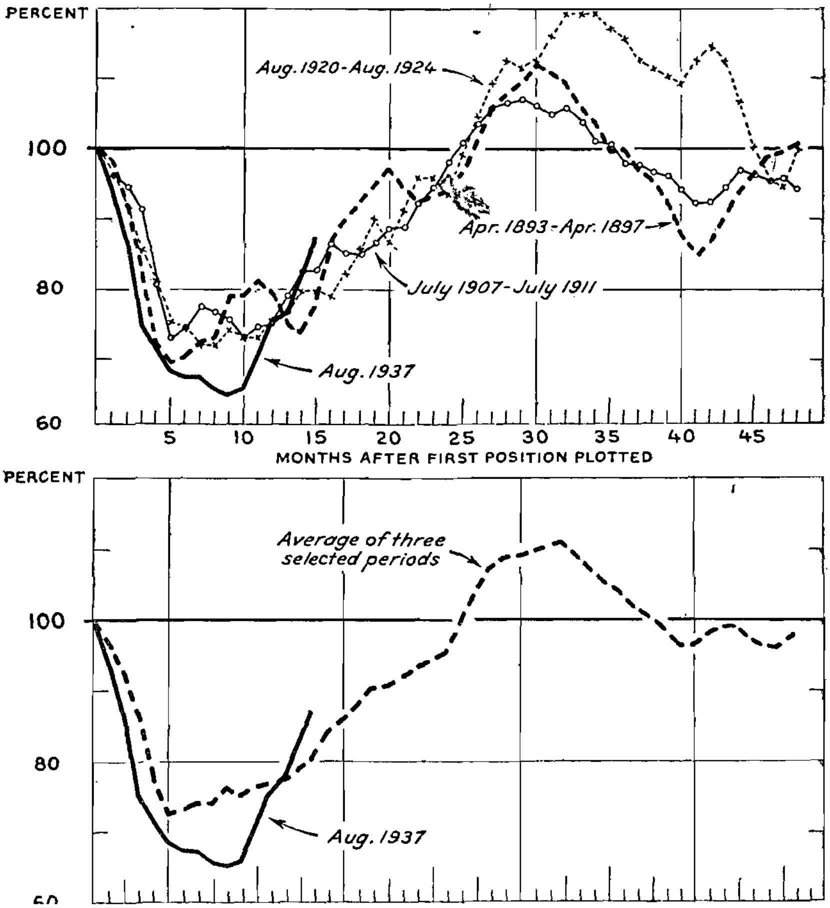
cal of the so-called business cycle which is generally described as consisting of something more than a 2-year rise followed by something more than a 1-year decline.

SINCE August 1937 the course of industrial production has roughly followed the average or typical cycle. (See lower half of chart.) Both the decline between August 1937 and June 1938 and the advance since then have been somewhat greater than the average. And if this recovery were to continue to follow this pattern of recoveries after similar abrupt declines, it would continue an irregular, though generally upward, course until about the first quarter of 1940. By that time it might reach a level about 10 percent higher than that of August 1937 (corresponding approximately to the Federal Reserve Board index of 130 percent of the 1923–25 average compared with 117 in August 1937).

If industrial production were to follow such a course (and still bearing in mind that this is not a forecast), we may raise the question as to what the general employment and unemployment situation would be, say by the spring of 1940. Would all industrial

INDUSTRIAL PRODUCTION, AUGUST 1937 TO DATE AND IN THREE SELECTED PERIODS

(FIRST MONTH IN EACH SERIES PLOTTED AS 100)



workers available for jobs be employed, or would jobs and production still fall short of what they should be in general prosperity?

To answer these questions we may turn to some simple relations between industrial production and industrial employment and to the trend in the working population. In January 1920, 41.8 percent of the nonagricultural population was classed by the Bureau of the Census as gainfully occupied. In April 1930 the percentage was 41.5. On the basis of the annual estimates of nonfarm population and interpolations between these two percentages, it appears that the nonfarm working population was 41.8 million in 1938.[1] Of this number, according to the estimates of the Bureau of Labor Statistics, 32.2 millions were employed, leaving 9.6 million persons unemployed and on relief work.

Industrial Production and Industrial Employment

	Industrial production [1]	Industrial production 2-year average [2]	Available nonagricultural workers [3]	Number employed [4]	Number unemployed [3]
	Percent	*Percent*	*Millions*	*Millions*	*Millions*
1928	111				
1929	119	116	37.7	36.1	1.6
1930	96	104	38.3	33.9	4.4
1931	81	86	38.7	30.9	7.8
1932	64	70	39.1	27.7	11.4
1933	76	72	39.6	27.7	11.9
1934	79	78	40.0	30.3	9.7
1935	90	87	40.4	31.5	8.9
1936	105	100	40.9	33.2	7.7
1937	110	108	41.3	34.6	6.7
1938	86	94	41.8	32.2	9.6

[1] Federal Reserve Board, 1923-25=100.
[2] Current year weighted 2, previous year 1.
[3] These estimates do not take into account the fact that the Unemployment Census of 1937 revealed a larger than normal proportion of the population available for work, amounting to 2.7 million persons. If any part of this figure is added to the estimates of employables, the *number unemployed* would be similarly raised.
[4] Bureau of Labor Statistics.

[1] This is exclusive of 2.7 million persons, chiefly women available for work according to the Unemployment Census of 1937 in excess of the usual relation of the working population to the total population. This excess is generally assumed to represent women who would not be available for work if men were fully employed.

THE relation between industrial production and total nonfarm employment has been sufficiently close during the past 20 years to serve as a basis for estimating productive employment to correspond with the assumed typical trend in industrial production. (See table for data for 1929–38.)

Thus, at the bottom of the depression in 1932 when industrial production averaged about 70 percent (of the 1923–25 base), about 27.7 million persons were employed in all nonfarm occupations, and in 1929 with production averaging 116 percent, 36.1 million nonfarm persons were employed.[2]

In 1938 with average production halfway between that of 1929 and 1932, the total of nonfarm employment was also about halfway between the employment of these respective years, namely 32.2 million.

The 20-year record of industrial production, nonfarm working population, and nonfarm employment has been brought together conveniently in the chart on page 12, together with projections.[3]

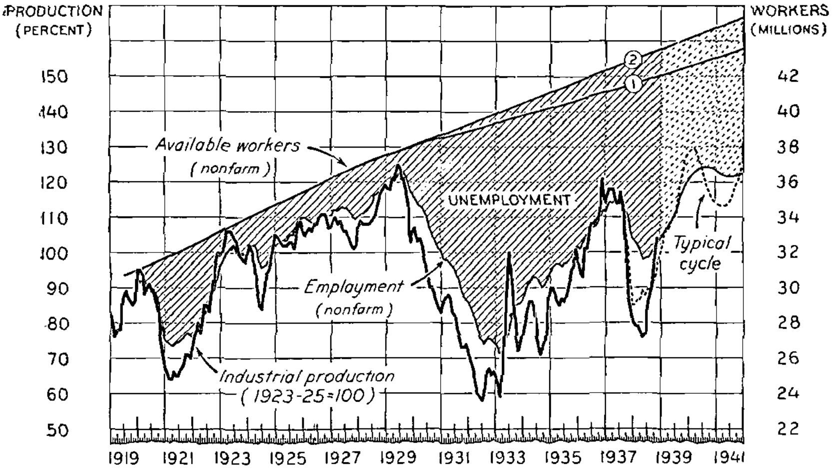
THE overall production and employment situation at the end of 1938 may be summarized thus: There were available for work about 42 million nonfarm persons. Of these, nearly 33 million were employed, leaving about 9 million unemployed and on relief work. Industrial production amounted to about 105 percent of the 1923–25 average, but should have been about 150 for full employment. In other words, we need about a 50 percent increase in industrial production

[2] In this relationship the Federal Reserve Board index of production for a given year is averaged with the production of the previous year, weighting the former 2 and the latter 1.

[3] Employment data, 1929–38, Bureau of Labor Statistics; 1919–28, A. A. A., based on annual and derived monthly ratios of factory to total nonfarm employment; 1939–41 based on 1929–38 relation between average production and employment. Nonfarm workers available for employment—1920 and 1930, Census; and interpolations by A. A. A.

the average price woul...

INDUSTRIAL PRODUCTION AND INDUSTRIAL EMPLOYMENT AND UNEMPLOYMENT, U.S. 1919 TO DATE



① ESTIMATE BASED ON CENSUS DATA
② ESTIMATE ADJUSTED FOR FINDINGS OF 1937 UNEMPLOYMENT SURVEY

to give jobs to most of those available for work.[4]

Such a rise in industrial output will not take place by the time the present recovery begins to taper off if recovery follows only the usual course. If production follows the typical cycle, it will reach a level of about 130 percent by the spring of 1940. We shall then be in a position roughly comparable to that of the spring of 1937. The advance in production will have been about half of the amount necessary for full employment.

It is true the volume of employment, assuming no major change in hours worked per week, would be greater but so would the total number available for employment, leaving about 6 million persons unemployed and on relief compared with around 6.5 million in the spring of 1937 and about 2 million in 1929. These estimates of unemployment in 1940 would be larger if more than the usual proportion of the population continues to be available for work. (See projection marked "2" on the above chart where 1.3 million in excess of the usual proportion of employables is assumed for 1937.)

[4] Full employment is probably unattainable, for in the prosperity years 1923, 1925, 1929 we had only about 95 percent full employment.

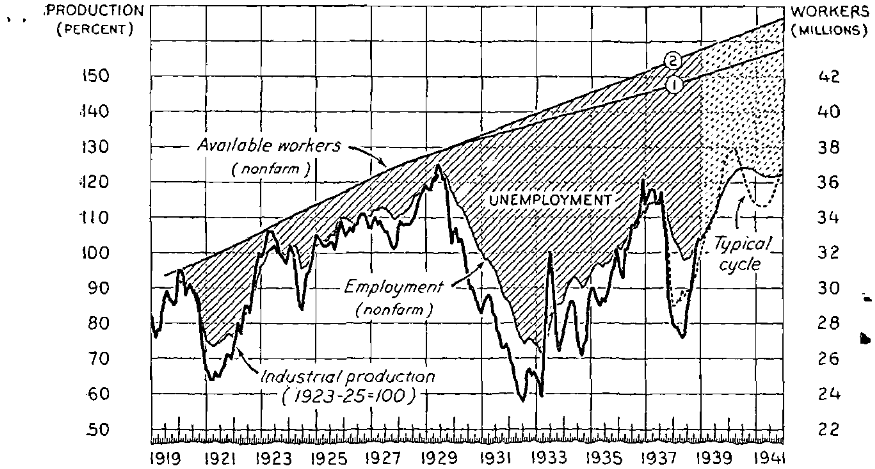
Total nonfarm employment by the spring of 1940 is thus likely to be in the neighborhood of 37 million and this is about the number of persons that were employed at the peak in 1929. In other words, the number of people that are likely to be unemployed in 1940, on the assumption of a typical recovery, will be greater than the number unemployed in 1929 by an amount approximately equal to the number added to the working force as a result of the growth in population.

THE typical course of recovery assumed in this study is approximately of the magnitude that developed between the fall of 1934 and the spring of 1937. In considering whether the typical cycle is an optimistic assumption or not for the immediate future, one may raise the question whether the recovery forces that will be at work from now on will be as powerful as were those of 1934–37.

Will the Federal contribution to national purchasing power be as great? Will private spending for capital goods be as large? Will housing activity continue to expand still further? Will public utilities and the railroads make substantially

the average price would be equal to or

INDUSTRIAL PRODUCTION AND INDUSTRIAL EMPLOYMENT AND UNEMPLOYMENT, U.S. 1919 TO DATE



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larger expenditures than those of the past year or two? Will farm income have the advantage of a substantial increase in foreign demand for wheat and cotton? Will foreign demand for industrial goods continue for military purposes without culminating in actual conflict? If these questions can be answered affirmatively, something like the typical cycle of industrial activity may develop.

But if we are to have a closer approach to the level of industrial production required for full employment, recovery more prolonged and more rapidly than has ever before been known, even in periods when private capital was flowing freely into new enterprise, will be necessary. Methods of promoting such recovery through cooperation of private and government investment and production programs challenge the ingenuity of economic statesmen.

L. H. BEAN.

Consumption of Agricultural Products

RECENT years have witnessed a rapid increase in the volume of research designed to increase our knowledge of consumption. Particularly marked has been the interest in the consumption of foods. To a very large extent, this has been stimulated by an advancing knowledge of nutrition which has caused attention to be directed to the problem of the adequacy of our national diet and by the desirability of estimating the acreage necessary to make available a supply of agricultural products sufficient to cover the normal consumption requirements of our present and future population.

The Bureau of Agricultural Economics and the Agricultural Adjustment Administration have compiled numerous series of the per capita consumption of agricultural products, which, when taken together, give a fairly complete and accurate picture of the consumption of these products on a national basis during the past two decades. This material is valuable for comparing actual consumption with standards established by nutritionists, for gauging future changes in consumption habits, and for making the indicated estimates of acreage requirements.

THE accompanying table contains estimates of the average per capita consumption of principal groups of agricultural products in the United States for certain significant periods since 1920. These estimates were prepared in the Program Planning Division of the Agricultural Adjustment Administration, chiefly from series collected by or compiled in the Bureau of Agricultural Economics.

The most significant figure in this table is the average per capita consumption of all farm products, which has remained remarkably stable since 1920. This is true whether measured in pounds, calories or acreages required. Consumption during the peak prosperity period, 1925–29, was only about 2 percent above the 18-year average; whereas in the depression period, 1930–33, it was only a fraction of a percent below.

In contrast, the average per capita consumption of agricultural raw materials and nonfood products, such as cotton, wool, flaxseed, and tobacco, has tended to vary directly with changes in general business activity. The average per capita consumption of cotton has varied with changes in the volume of industrial production, that of flaxseed with the volume of construction con-

tracts awarded, and that of tobacco with consumer incomes, although in this instance the relation has been somewhat obscured by the strong upward trend which has characterized tobacco consumption throughout the period.

This of course does not mean that the consumption of specific foods is insensitive to changes in business activity. The consumption of sugar, for example, is appreciably affected by variations in consumer incomes, particularly those of industrial workers. On the whole, however, the total demand for food is in the nature of a constant physical requirement, while under the existing organization of agriculture, a comparatively steady volume of food is produced and moved into the markets with but little regard to the prices received.

THE stability of the per capita consumption of all food products is partly the result of stability in the consumption of individual items in our diet and partly of the offsetting influences of divergent trends. For the most important commodity groups shown in the table, tendencies to increase are most apparent in dairy products and vegetables, while tendencies to decline are most apparent in cereal products, potatoes, and lean meats. The trends are for the most part gradual movements of relatively long duration which do not place an excessive burden of adjustment upon producers.

In the dairy product group, the most marked uptrends are to be found in ice cream, evaporated milk, and cottage cheese. The uptrend in vegetables is evident for both the fresh and canned products. Over half the increase in the consumption of fresh vegetables from the beginning to the end of the period is accounted for by carrots, celery, and lettuce; while in canned vegetables, nearly half of the increase is accounted for by tomato products alone, with over 50 percent of this rise being due to the marked increase in the consumption of tomato juice since 1929.

Several items in the cereal group exhibit a downward trend. The per capita consumption of wheat flour, as estimated by the Food Research Institute, declined from an average of 176 pounds in the period 1920–24 to 154 pounds in 1934–37. The per capita consumption of cornmeal has also trended downward, and the Census of Manufactures indicates a falling off in the use of cereal breakfast foods since 1929.

ALTHOUGH the trend in the per capita consumption of meat has been downward for a considerable period of time, recent movements have not been uniform. The trend in the per capita consumption of beef was definitely downward from the turn of the century until 1931, but since then the movement has been rather markedly upward. The consumption of veal appears to have a very gradual upward trend, while that of lamb and mutton has fluctuated around a fairly stable level. The per capita consumption of pork trended downward until 1917, and then upward until 1933. Since 1934 the production of pork has been subnormal as a result of the effect of the severe droughts upon corn production. Recovery of output will undoubtedly bring an increased consumption and tend to level out per capita meat consumption as a whole.

Although the per capita consumption of fruits has fluctuated around a fairly stable level, there have been significant changes in individual items. The absence of trend in fresh fruits taken as a whole is primarily the result of a marked upward trend in the consumption of citrus fruits and grapes, which in turn is largely offset by a marked downward trend in the consumption of apples. The consumption of canned fruits shows a pronounced upward movement, with that of peaches, pears, pineapples, grapefruit, and fruits for salad being particularly well-defined.

Average per Capita Consumption of Principal Agricultural Products, 1920–37 [1]

[Pounds per capita per year]

Commodity or group	Average				
	1920–24	1925–29	1930–33	1934–37	1920–37
Cereal products	229	226	211	196	217
All potatoes	178	164	156	157	164
Sugar and sirup	106	118	107	110	110
Dairy products:					
Milk and cream [2]	315	334	337	328	328
Manufactured	40	45	46	49	45
Fruits:					
Fresh [3]	179	192	184	189	186
Dried	6	6	5	6	6
Vegetables [4]	135	148	154	169	151
Lean meats and fish	138	133	129	126	132
Eggs	28	32	32	30	30
Beans, peas, nuts	11	14	16	16	14
Fats (excluding butter)	44	47	47	45	46
Coffee, tea, spices, and chocolate	16	17	18	19	17
Total food	1, 425	1, 476	1, 442	1, 440	1, 446
Wool	6	5	4	5	5
Cotton	27	29	23	26	26
Tobacco [5]	8	9	8	9	9
Flaxseed	16	20	12	11	15

[1] Consumption of foodstuffs in terms of estimated weight available for sale in retail market.
[2] Whole milk and cream in terms of whole milk.
[3] Fresh and canned fruit in terms of fresh fruit, on basis of total population, consumption of watermelons and cantaloups per urban inhabitant.
[4] Fresh and canned vegetables in terms of fresh, per urban inhabitant.
[5] Consumption per person 15 years old or over, or per person of smoking age.

WHAT is the significance of this situation for the producers of agricultural products? If we assume, as seems reasonable, that this stability of consumption will be characteristic of the future and that the level of national income will be high enough to permit the purchase of agricultural products on a per-capita level at least as high as prevailed in the period 1925–29, then we may expect that in the 5-year period just ahead we will require not less than 260 to 265 million acres for the production of domestically consumed food and fiber, plus 40 to 45 million acres of feed grains and hay for workstock.

With our present export outlook, and taking into consideration the requirement of soil conservation, good farm management, and a balance between farm and nonfarm income, this leaves us with an excess acreage of at least 20 to 30 million acres. If, on the other hand, there is a marked increase in national income, a better distribution among the population, a better knowledge and appreciation of dietary requirements, and perhaps some special encouragement of consumption among the lower income groups, then our estimates of acreage requirements would have to be revised upward and those of excess acreage down.

J. P. Cavin,
Agricultural Adjustment Administration.

(An increased amount of attention is being given to the economics of consumption throughout the world. The International Labor Office and the Mixed Committee on the Problem of Nutrition of the League of Nations have recently published reports on the subject, and the Economics Committee of the League has been charged with the responsibility of preparing a report of national and international measures designed to raise standards of living. In this country, the Bureau of Home Economics of this Department and the U. S. Bureau of Labor Statistics are engaged in an extensive study of consumer purchases by income and family types. Economists and others are beginning to explore the possibilities of increasing consumption among the lower income groups through programs involving differential prices, the elimination of nonessential cost elements for specific commodities, and general improvement of the marketing system. These problems are also of much concern to the subcommittee on nutrition of the President's committee for coordinating the health and welfare activities of the Government.)

Exports Small the average price would be equal to

Farm Imports Under Trade Agreements

THE reciprocal trade agreements program of the United States is aimed at the increase of mutually beneficial trade between the parties to the agreements.

Hence, it is natural to expect them to increase not only our farm exports (as data presented in the December issue of The Agricultural Situation indicate that they have) but to increase our farm imports as well. It is not desirable, however, that they should increase imports of farm products which can be produced effectively in this country and it is especially undesirable that they should have a disruptive influence on domestic farm markets. An examination of available data indicates that the agreements have tended to increase farm imports, but that safeguards included in the texts of the agreements have prevented any increases which might have disturbed domestic markets.

At first glance, the data for farm imports from trade-agreement countries and nonagreement countries appear to show a more favorable situation for the latter than for the former over the past 3 fiscal years. From 1935–36 to 1937–38, total farm imports from the 16 countries with which trade agreements were in effect by August 1937 decreased by 3 percent while those from all other countries increased by 4 percent. This was due almost entirely, however, to lower imports from Canada and Cuba where, as is discussed below, the trade agreements have not been responsible for the reductions.

WHEN the data on farm imports are broken down to show Canada and Cuba separately from the other trade-agreement countries, as in the following table, a rise of 22 percent is shown for trade-agreement countries other than Canada and Cuba.

The decline in imports from Cuba is less surprising than it might at first appear, since the trade agreement was in effect throughout both of the years being compared. If we set 1933, the first full preagreement year, against 1935, the first full post-agreement year, total United States imports from Cuba rose from 58 million dollars to 111 million dollars, a rise of 91 percent. For the same years, total imports from all countries rose by only 41 percent. The corresponding figures for agricultural imports were a 93 percent increase from Cuba and a 43 percent increase from the rest of the world. Agricultural imports from Cuba during 1937–38 were 80 percent larger than during 1933. Thus, the Cuban agreement is no exception to the rule that trade agreements tend to expand trade in both directions.

The decline in imports from Canada did not occur, for the most part, in items upon which United States

United States Imports From Trade-Agreement Countries [1] and Other Countries

	Year ended June 30				
	1935–36	1936–37	1937–38	Increase (+) or decrease (−) 1937–38 over 1935–36	
United States imports (for consumption) of agricultural commodities:	*Million dollars*	*Million dollars*	*Million dollars*	*Million dollars*	*Percent*
From 16 trade-agreement countries	468	600	454	−14	−3
From Canada and Cuba	204	249	131	−73	−36
From 14 other trade-agreement countries	264	351	323	+59	+22
From nonagreement countries	674	937	701	+27	+4

[1] Belgium; Brazil; Canada; Colombia; Costa Rica; Cuba; El Salvador; Finland; France, including her colonies, dependencies, and protectorates other than Morocco; Guatemala; Honduras; Haiti; Kingdom of the Netherlands; Nicaragua; Sweden; and Switzerland.

duties were reduced by the terms of the trade agreement. It occurred because a number of commodities which were imported heavily during the period of drought shortage in the United States (1935–37) have since been imported in only negligible quantities. Imports of commodities upon which United States duties were reduced under the agreement actually rose by 12 percent between 1935–36 and 1937–38.

THE possibility of increased agricultural imports from trade-agreement countries disrupting domestic farm markets, however, has been carefully guarded against, not only by refusing to reduce United States farm tariffs sufficiently or in such a way as to disturb domestic markets but also by introducing specific safeguards where reductions were made on the more important so-called "competitive" agricultural imports. Sugar, the largest item of trade affected by such reductions, is an excellent example. The reduction in the duty on sugar imports into the United States, under the terms of the trade agreement with Cuba, went into effect only after quantitative country quotas had been imposed on all sugar imports. These quotas prevented the lowered duty from resulting in any expansion of the quantity of sugar imported.

Another important case is that of live cattle, upon certain classes of which the United States duty was lowered by the terms of the trade agreement with Canada. The reduced duty applies only to a specified quantity, a very small fraction of our total cattle supplies. Even in years when this quota can be filled, it is too small to have a significant effect on domestic markets. Furthermore, in the second Canadian agreement, effective January 1, 1939, provision is made for the reduced duty to apply to only a specified number each quarter.

Other important tariff concessions which are similarly guarded include those on potatoes and grain. The concession in the duty on Cheddar cheese under the Canadian agreement has been criticized because it was not guarded by a tariff quota. Imports under the reduced duty, however, even in drought years, have represented a lower proportion of domestic production than during the 5 preagreement years, 1925–29. The proportion during the first 6 months of 1938 was one-third of 1 percent of domestic Cheddar cheese production. Hence, such criticism appears to be unwarranted.

In evaluating the figures for total imports of agricultural products from countries with which trade agreements have been concluded, it is important to remember that, except for a few countries such as Canada and Cuba, most of the agricultural products involved consist of such commodities as rubber, coffee, cacao beans, and other tropical products in which the American farmer is interested as a consumer, rather than as a producer.

WHEN the 1938 trade agreements, particularly that with the United Kingdom, have been in effect long enough for a statistical record of their operations to be available, it is anticipated that the record will indicate much greater benefits to American farmers especially through expanded farm exports, than they have received under the first 16 agreements. Those agreements covered countries which took only 28 percent of our agricultural exports during 1929. Agreements in effect on January 1, 1939, will cover countries that took 55 percent of those exports.

R. B. SCHWENGER.

A further decline in farm-mortgage debt during 1937 and in the first half of 1938 is reported by BAE. The total debt as of January 1, 1938, was $7,082,156,000, compared with $7,254,821,000 a year earlier. The decline during 1937 was a continuation of a trend in evidence for the past 9 years. As of January 1, 1930, the total was $9,214,278,000.

copra and coconut oil increased so enormously in 1917, the use of coconut oil in oleomargarine began to assume increasing importance. Coconut oil reached a high point of 75 percent of the total of all oils used in oleomargarine in 1933.

But in 1933 another change was in the making, influenced by a wave of State legislation taxing oleomargarine containing any fats or oils other than specified domestically produced fats and oils, together with an excise tax of 3 cents per pound on the first domestic processing of coconut oil. In 1937 total foreign vegetable oils contributed less than 30 percent of the fats and oils used in oleomargarine. For the coconut oil so displaced, cottonseed oil and soybean oil have been largely substituted.

In November 1936 (for the first time since 1916) more cottonseed oil than coconut was used in oleomargarine. In 1937, domestic vegetable oils supplied almost 65 percent of the total fats and oils used. During the past year, however, supplies of foreign oils have been plentiful and low in price; since January 1938 there has been a slight increase in their use in the manufacture of oleomargarine.

THE people in a number of foreign countries consume much larger quantities of oleomargarine than in the United States. But production in some foreign countries has been declining. Per capita disappearance in Germany dropped from about 15 pounds in 1929 to about 12 pounds in 1937; in the Netherlands the decline was from about 20 pounds in 1929 to about 14 in 1937; in Denmark the per capita decrease was about 4 pounds, or from about 50 pounds in 1929 to about 46 in 1937.

ANNE DEWEES.

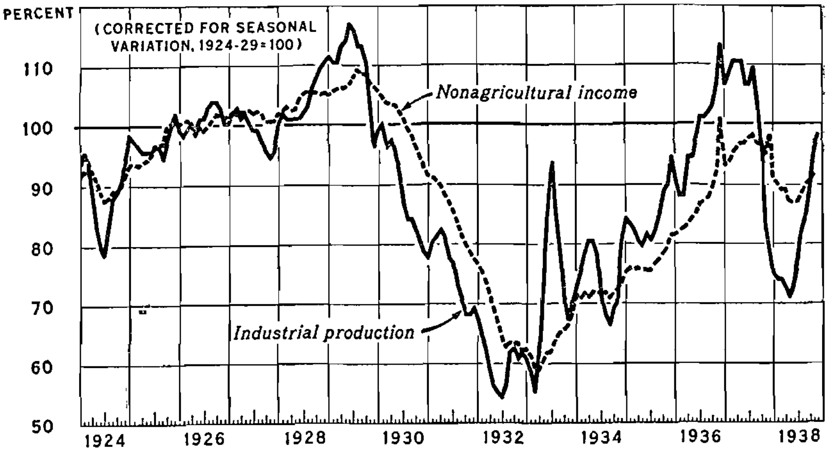
Dynamic Industrial Recovery

THE gain in industrial production during the last half of 1938 was one of the sharpest on record—perhaps the sharpest with the single exception of the pre-N. R. A. recovery of 1933. A gain of one-third in the Federal Reserve Board index of production during the final 6 months of 1938 brought this index up to the 1936 average—the year in which business had the extra stimuli of soldiers' bonus payments of about 1.5 billion dollars as well as other business stimulating expenditures of the Federal Government far in excess of those in 1938. It would be wrong, however, to infer from this that Government spending had nothing to do with the 1938 recovery. Deficit spending has increased almost continuously for the past year until the net contribution of the Federal Government toward community expenditures is again about as high as at any time since 1936.

The quick turn-about in industrial production at mid-1938 has been followed by substantial improvement in nonagricultural income. Such income totaled about 60 billion dollars in 1938 as compared with 64 billion a year earlier and 58¼ billion in 1936. By the year-end nonagricultural income was up to an annual rate of 62 billion dollars as compared with a June 1938 low annual rate of only 58 billion. Further improvement during the whole of 1939 equal only to that of the last half of 1938 would result in nonagricultural income equal to that of 1937. Living costs have continued to recede. In November 1938 they were the lowest in 23 months, having declined about 1 percent since June. The effect of lower living costs and expanding consumer incomes on business is strikingly illustrated by improvement in the automobile industry.

Farmers will share in the better trend of industrial production and nonagricultural income through increased demand for farm and food products. Retail food sales should

MONTHLY INDEXES OF INDUSTRIAL PRODUCTION AND OF NONAGRICULTURAL INCOME, 1924-38



increase by more than half a billion dollars in 1939 on the basis of the probable increase in consumer income. The demand for cotton and other industrial raw materials should improve materially along with the expected increase in industrial production.

P. H. Bollinger.

Insuring The Wheat Crop

THE Federal Crop Insurance Corporation recently completed the collection of the major part of premium payments for policies on 1939 winter wheat.[1] Approximately 108,000 payments representing a total of 3,192,000 bushels of wheat had been made up to December 16. The wheat in the insurance reserve represents coverage on about 3,625,000 acres.

Growers' applications for insurance are now being taken in the eight Spring Wheat States. Should only 50 percent of the applications already received materialize into policies, about 2,125,000 acres will be added to the insured acreage. Thus, in its first year, the Corporation may insure a total of 5 million to 7.5 million acres of wheat, depending on the extent to which spring wheat growers participate. The Corporation's liability, with such participation, might involve an insured production of 40 million to 60 million bushels of wheat.

PREMIUMS already paid assure wheat crop insurance policies in effect in more than 1,000 counties in 30 States. In major winter wheat States approximately 50 percent of the growers who applied for policies paid their premiums. The heaviest percentage is in Iowa, where 69 percent paid their premiums. Percentages for other representative States are 63 for Oklahoma, 62 for Texas, 54 for Kansas, 55 for Illinois, 61 for Indiana, 49.9 for Missouri, and 43.9 for Nebraska. It is believed that the percentage of premiums paid will be somewhat higher in the spring wheat area, where later planting dates will allow the Corporation more time to arrange for collection of premiums.

Significant is the fact that "sign-up" has not been confined to the so-called "commercial" Wheat Belt. It is heavy east of the Mississippi River as well, showing that wherever wheat is grown

[1] Articles dealing with the crop insurance program appeared in issues of The Agricultural Situation of December 1936, July 1937, November 1937, and June 1938.

as a cash crop or as a part of the general farm rotation, growers are interested in protecting their yields against unavoidable losses. Participation is large enough and of such wide distribution that the crop insurance principle will be given a thorough trial in every county where wheat is a crop of any consequence.

TWO factors which have ser ously limited participation are the lack of credit and high loss cost in some areas. Lending agencies in many localities have cooperated in providing credit for the payment of insurance premiums, but in other areas, particularly in the western Great Plains, where insured yields are low and loss costs are relatively high, adequate credit has not been available.

The present actuarial base of the wheat program ties in to some extent with the problem of participation, particularly in the Great Plains, where the base period 1930–36 included a series of unprecedented drought years. Although this was to some extent smoothed out by adjustment to 1926–30, many growers felt that the premium for their farms represented too high a proportion of the assured yield.

(The Corporation and the Bureau of Agricultural Economics are now making a thorough study of this problem in the light of yields and losses of 1936–37 and 1938. This may result in a 13-year base more closely in line with the long-time average risks of growing wheat.)

SEVERAL byproducts of the crop insurance program add materially to its accomplishments. One is the fact that by means of crop insurance many producers are able to plan to stabilize their farming systems feeling that they can plan more intelligently for the future.

Another byproduct is the use of crop insurance as a part of leasing arrangements and land sales contracts. Under this plan, which is now being tested in the Northwest, leases are being made on the basis of a fixed number of bushels of wheat, with an insurance policy guaranteeing the payment.

Similarly, some landowners have found that it is easier to sell land on a fixed commodity contract under which the price of the land is stated in bushels, and the minimum payment each year is insured to the seller through a policy. Institutions find that where the tenants can be sure of a minimum production, and are safeguarded against accrued deficiencies, the parties to the lease are enabled to set up a long-time relationship not previously possible.

In the purchase of land, some landowners are finding it possible, through insurance, to sell to tenants and farm laborers who otherwise would not be able to put up the necessary large down payment nor to assume the gamble of ownership, where a crop failure or two might cause them to lose title.

JOHN A. BIRD,
Federal Crop Insurance Corporation.

FARM EMPLOYMENT: Decline

Farm employment decreased more than seasonally in November, affected principally by the abnormally cold weather. The Pacific coast was the only region employing more hired labor than in November a year earlier. Reduction of the hired farm labor force in the South was attributed to the near-completion of the cotton harvest.

BAE reported a national average of 83 hired laborers per 100 farms of crop reporters on December 1, compared with 101 on November 1, and with 90 on December 1, 1937. Smaller reductions were reported in farm family labor. The estimates are based upon returns from crop reporters.

Crop Production in 1938

NEARLY 342,000,000 acres of 45 crops were harvested in 1938. This compares with 341,000,000 acres in 1937, and with 343,000,000 acres average for the 10 years 1927–36. The average for the predrought years 1923–32 was 354,000,000 acres.

Principal changes in the acreage harvested in 1938 compared with 1937 were decreases of about 9,000,000 acres of cotton and 2,000,000 acres of corn, and increases of about 6,000,000 acres of wheat, about 2,000,000 acres of hay, and about 1,400,000 acres of clover seed.

The area of crops planted for harvest in 1938 and which was subsequently abandoned was about 14,000,000 acres. This was the smallest abandonment since 1932. Most of it was in the central and northern portions of the Great Plains. Nearly half of the acreage abandoned was of winter wheat, and nearly half of the remainder was spring wheat.

Crop yields in 1938 averaged about 5 percent less than in 1937, the year of highest outturn, but were fully 6 percent higher than in any other season since 1920. They were 16 percent above the 1927–36 average, and about 11 percent above the 1923–32 predrought average. Practically all crops shared in the high 1938 yields as compared with the predrought average, notably cotton, hay, and the annual legumes.

Considering yields per acre, the acreage harvested, and the shifts between crops, total crop production in 1938 was about 7 percent less than in 1937. The 1938 production was 11 percent more than the average for the 10 years 1927–36, and 5 percent above the average for the 1923–32 predrought years.

W. F. CALLANDER.

Measures of Domestic Demand

[1924–29=100]

	November				Percent change		
	1929	1933	1937	1938	1937–38	1933–38	1929–38
National income	106.5	65.3	93.1	90.1	−3	+38	−15
Nonagricultural income:							
Total	107.7	67.3	94.6	91.9	−3	+37	−15
Per capita	101.8	62.0	84.1	81.2	−3	+31	−20
Factory pay rolls:							
Total	102.3	55.9	90.6	82.0	−9	+47	−20
Per employed wage earner	98.5	69.2	90.5	91.5	+1	+32	−7
Industrial production:							
Total	103.0	67.4	82.4	96.4	+17	+43	−6
Factories processing farm products	103.1	92.6	86.1	107.1	+24	+16	+4
Other factory production	103.0	53.7	78.0	92.2	+18	+72	−10
Construction activity:							
Contracts awarded, total	85.1	39.7	46.3	73.6	+59	+85	−14
Contracts awarded, residential	60.0	11.6	28.7	48.4	+69	+317	−19
Employment in production of building materials	90.2	42.4	64.4	59.7	−7	+41	−34
Cost of living:							
Food	102.8	68.2	80.5	74.9	−7	+10	−27
"All other items"	98.2	82.3	86.3	85.8	−1	+4	−13
Purchasing power of nonagricultural income per capita:							
For food	99.0	90.9	104.5	108.4	+4	+19	+9
For "All other items"	103.7	75.3	97.5	94.6	−3	+26	−9

NOTE.—All indexes adjusted for seasonal variation except "Cost of living."

General Trend of Prices and Wages

[1910-14=100]

Year and month	Wholesale prices of all commodities [1]	Industrial wages [2]	Prices paid by farmers for commodities used in [3]— Living	Production	Living and production	Farm wages	Taxes [4]
1920	225	222	222	174	201	239	209
1921	142	203	161	141	152	150	223
1922	141	197	156	139	149	146	224
1923	147	214	160	141	152	166	228
1924	143	218	159	143	152	166	228
1925	151	223	164	147	157	168	232
1926	146	229	162	146	155	171	232
1927	139	231	159	145	153	170	238
1928	141	232	160	148	155	169	239
1929	139	236	158	147	153	170	241
1930	126	227	148	140	145	152	238
1931	107	208	126	122	124	116	217
1932	95	179	108	107	107	86	188
1933	96	172	109	108	109	80	161
1934	109	183	122	125	123	90	153
1935	117	192	124	126	125	98	155
1936	118	200	122	126	124	107	156
1937	126	215	128	135	130	120	161
October	125	214	----------	----------	128	126	----------
November	122	206	----------	----------	127	----------	----------
December	119	208	126	127	126	----------	----------
1938—January	118	204	----------	----------	126	111	----------
February	116	207	----------	----------	126	----------	----------
March	116	208	123	128	125	----------	----------
April	115	204	----------	----------	125	115	----------
May	114	201	----------	----------	125	----------	----------
June	114	202	122	126	124	----------	----------
July	115	205	----------	----------	123	120	----------
August	114	209	----------	----------	122	----------	----------
September	114	214	121	122	121	----------	----------
October	113	212	----------	----------	[5] 121	118	----------
November	113	207	----------	----------	[5] 121	----------	----------

Year and month	Index of prices received by farmers [August 1909-July 1914=100] Grains	Cotton and cottonseed	Fruits	Truck crops	Meat animals	Dairy products	Chickens and eggs	All groups	Ratio of prices received to prices paid
1920	232	248	191	--------	174	198	223	211	105
1921	112	101	157	--------	109	156	162	125	82
1922	106	156	174	--------	114	143	141	132	89
1923	113	216	137	--------	107	159	146	142	93
1924	129	212	125	150	110	149	149	143	94
1925	157	177	172	153	140	153	163	156	99
1926	131	122	138	143	147	152	159	145	94
1927	128	128	144	121	140	155	144	139	91
1928	130	152	176	159	151	158	153	149	96
1929	120	144	141	149	156	157	162	146	95
1930	100	102	162	140	133	137	129	126	87
1931	63	63	98	117	92	108	100	87	70
1932	44	47	82	102	63	83	82	65	61
1933	62	64	74	105	60	82	75	70	64
1934	93	99	100	103	68	95	89	90	73
1935	103	101	91	125	118	108	117	108	86
1936	108	100	100	111	121	119	115	114	92
1937	126	95	122	123	132	124	111	121	93
November	85	65	88	124	120	132	135	107	84
December	86	64	76	112	111	136	127	104	83
1938—January	91	66	70	101	110	128	113	102	81
February	89	68	68	121	110	121	94	97	77
March	85	70	69	107	117	117	93	96	77
April	82	71	68	117	114	110	93	94	75
May	79	71	77	99	111	103	98	92	74
June	77	68	73	99	116	98	99	92	74
July	72	71	79	115	123	101	103	95	77
August	62	69	78	91	115	102	105	92	75
September	63	69	75	98	117	104	118	95	79
October	60	72	70	108	111	107	124	95	[5] 79
November	60	72	71	98	111	109	131	94	[5] 78
December	63	70	73	107	109	112	127	96	[5] 80

[1] Bureau of Labor Statistics Index with 1926=100, divided by its 1910-14 average of 68.5.
[2] Average weekly earnings, New York State factories. June 1914=100. Revised.
[3] These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.